

91. A device according to Claim 88, wherein the tissue ablator comprises a radiofrequency electrode.

92. A device according to Claim 88, wherein the tissue ablator comprises an ultrasound transducer.

93. A device according to Claim 88, wherein the tissue ablator comprises an array of ultrasound transmissive panels.

94. A device according to Claim 88, wherein the tissue ablator comprises a piezoelectric ultrasound transducer.

95. A device according to Claim 88, wherein the tissue ablator comprises a piezoelectric transducer.

96. A device according to Claim 88, wherein the protector comprises a portion of the probe.

97. A device according to Claim 88, wherein the protector comprises a foot plate.

98. A device according to Claim 88, wherein the elongate probe is substantially L shaped and has a proximal and distal portion, the distal portion extending generally perpendicularly from the distal end of the proximal portion.

99. A device according to Claim 98, wherein the protector and the tissue ablator are located substantially opposite one another on the distal portion of the probe.

100. A device according to Claim 88, further comprising:
an aspiration port.

101. A device according to Claim 88, further comprising:
an irrigation port.

102. A device according to Claim 88, further comprising:
an aspiration/irrigation port.

103. A device according to Claim 88, wherein the distal end of the elongate probe is configured to advance through Schlemm's canal and to penetrate through the tissue of the trabecular meshwork.

104. A method for treating glaucoma, the method comprising the steps of:

a) providing a glaucoma treatment device that comprises i) an elongate probe having a probe tip configured for insertion into Schlemm's canal, ii) a tissue ablator for ablating the trabecular meshwork, and iii) a protector;

b) advancing the elongate probe into Schlemm's canal such that the protector is positioned adjacent to the scleral wall of Schlemm's canal; and

c) using the tissue ablator to ablate at least a portion of the trabecular meshwork while the protector shields the endothelial cells lining the scleral wall of Schlemm's canal from being substantially damaged by the ablator.

105. A method according to Claim 104, wherein the tissue ablator comprises a laser and wherein Step C comprises the performance of laser ablation of at least a portion of the trabecular meshwork.

106. A method according to Claim 104, wherein the tissue ablator comprises a rotating cutting member and wherein Step C comprises using the rotating cutting member to sever at least a portion of the tissue that forms the trabecular meshwork.

107. A method according to Claim 104, wherein the tissue ablator comprises a radiofrequency electrode and wherein Step C comprises using the radiofrequency electrode to ablate at least a portion of the trabecular meshwork.

108. A method according to Claim 104, wherein the tissue ablator comprises an ultrasound transducer and wherein Step C comprises using the ultrasound transducer to ablate at least a portion of the trabecular meshwork.

109. A method according to Claim 104, wherein the tissue ablator comprises an array of ultrasound transmissive panels and wherein Step C comprises using the ultrasound transmissive panels to ablate at least a portion of the trabecular meshwork.

110. A method according to Claim 104, wherein the tissue ablator comprises a piezoelectric transducer and wherein Step C comprises using the piezoelectric transducer to ablate at least a portion of the trabecular meshwork.

111. A method according to Claim 110, wherein the piezoelectric transducer is a piezoelectric ultrasound transducer.

112. A method according to Claim 104, wherein Step C further comprises aspirating the severed tissue through an aspiration port.

113. A method according to Claim 112, wherein the aspiration port is integrally provided with the probe.

114. A method according to Claim 104, wherein Step C further comprises flushing a fluid through an irrigation port into Schlemm's canal.

Appl. No. : 10/052,473
Filed : January 18, 2002

115. A method according to Claim 114, wherein the irrigation port is integrally provided with the probe.

116. A method according to Claim 104, wherein Step C further comprises aspirating and irrigating fluid through the probe tip.


Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 4/26/02

By:


James B. Bear
Registration No. 25,221
Attorney of Record
620 Newport Center Drive
Sixteenth Floor
Newport Beach, CA 92660
(949) 760-0404

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